Computer-aided prescription of herb medicines

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Abstract

It is an object of the present invention to eliminate needs for crude drugs in stock or dispensing machines and to dispense herb medicines having stable quality without expertise. When a patient comes to an agency T, a pharmacist makes an access to a computer 3 by using a terminal device 2 installed in the agency asks the patient detailed questions about general symptoms and principal symptoms, performs an examination of tongue appearance in accordance with a predetermined format, and inputs chart data including the obtained result or the patient's medicinal record. The computer generates a dispensation list showing symptom result data and usable dispensations based on crude-drug efficacy data stored in a dispensation data storing portion, dispensation data and the chart data, and the pharmacist in a compounding center CC prescribes the crude drug based on that dispensation list and sends the packed dispensation to any of agencies T1 to Tn or the patient's address.

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Description

HERB MEDICINE PRESCRIPTION AIDING METHOD AND SYSTEM
BACKGROUND OF THE INVENTION
Field of the Invention
The present invention relates generally to herb medicine prescription aiding method and system, and more particularly to a technique which is effective when applied to dispensation of herb medicines.

Related Art Statement
In agencies using herb medicines such as pharmacies or drugstores, it has been widely known that crude drugs suitable for a patient's condition are prepared in each agency after asking detailed question about the patient' s condition or performing a so-called examination of tongue appearance for checking the appearance of the patient' s tongue.

The present inventors have found, however, that there are following problems in the above-described handling of herb medicines.

That is, since herb medicines are prepared in respective agencies, various herb medicines must be kept in the storehouse, and dispensing machines for preparing these herb medicines are also required, which disadvantageously increases the inventory cost or the cost for dispensing machines that can be a burden.

Further, the expertise is necessary for compounding the herb medicines, and preparation may adversely differs depending on the knowledge or experience of a dispensing operator, which results in unstable quality in each agency, thereby causing a difference in effects.

SUMMARY OF THE INVENTION
It is an object of the present invention to provide herb medicine prescription aiding method and system which can eliminate crude drugs in stock or dispensing machines and prepare herb medicines of stable quality without the expertise.

The typical outline of the invention disclosed in this application will be briefly described as follows.

That is, a herb medicine prescription aiding method according to the present invention comprises the steps of: inputting a patient' s chart data in accordance with a predetermined format by a data input/output means; selecting crude drugs effective for the patient's condition from a prescription aiding data stored in a first memory portion by a first arithmetic operation portion based on the input patient's chart data; generating a dispensation list of the selected crude drugs by the first arithmetic operation portion based on the prescription aiding data stored in the first memory portion; and outputting the generated dispensation list by an output means.

The dispensation list optimum for the patient's condition can be therefore generated by only inputting the patient's chart data in accordance with a predetermined format. In addition, a herb medicine prescription aiding method according to the present invention further comprises the steps of: judging whether the contents of the generated dispensation list correspond to pharmaceutically-manufactured medicines by a third arithmetic operation portion based on a pharmaceutically-manufactured medicine data stored in a third memory portion; and generating a dispensation data according with the pharmaceutically-manufactured medicines similar to prescription of the dispensation list the contents of which correspond with dispensation other than the pharmaceutically-manufactured medicines by a fourth arithmetic operation portion based on the prescription aiding data stored in the first memory portion when determined that prescription of the dispensation data corresponds to the dispensation other than the pharmaceutically-manufactured medicines.

Even in the case where the dispensation optimum for the patient is that other than pharmaceutically-manufactured medicines, regeneration of a dispensation list according with the pharmaceutically-manufacturedmedicines similar to that dispensation therefore ensures preparation of a dispensation list according with the pharmaceutically-manufactured medicines suitable for the patient' s condition.

It is to be noted that the pharmaceutically-manufactured medicines described in this specification mean

medical items according to Japanese
Pharmacopoeia, which can be manufactured by a manufacturer under license of manufacturing pharmaceuticals, i.e., a manufacturer having a medical item manufacturing license with the consent of the Minister of Public Welfare in specifications of the Drugs, Cosmetics and Medical Instruments Acts.

Additionally, a herb medicine dispensation aiding method according to the present invention further comprises the steps of: collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects by a fifth arithmetic operation portion based on a pharmaceutical avoidance list stored in a fourth memory portion; and warning of dispensation including the detected crude drugs by using the output means.

It is therefore possible to prevent the drugs which are currently taken by the patient and crude drugs which may cause harmful side effects from being used.

A herb medicine dispensation aiding system according to the present invention comprises: a plurality of data input/output means which are installed in a plurality of specific agencies and register, update or consult a chart of each patient; a processing means which is constituted by a first memory portion storing a prescription aiding data for aiding prescription, a first arithmetic operation portion for generating a'list of crude drugs effective for a patient' s condition based on a chart data input from the data input/output me ans and the prescription aiding data stored in the first memory portion, a second arithmetic operation portion for generating a dispensation list based on the crude drug list generated by the first arithmetic operation portion and the prescription aiding data stored in the first storing portion, and a second memory portion for storing the dispensation list generated by the second arithmetic operation portion and the chart data input from the data input/output means, the processing means on-line-connected with a plurality of the data input/output means; and an output means for displaying or outputting the dispensation list generated by the processing means.

The processing means can therefore produce a dispensation list optimum for the patient' s condition and the output means can output the dispensation list by only inputting the patient' s chart data by data input/output means in accordance with a predetermined format.

A herb medicine prescription aiding system according to the present invention has the processing means provided with: a third memory portion storing a pharmaceutically-manufactured-medicine data; a third arithmetic operation portion for judging whether the contents of the prescription list generated by the second arithmetic operation portion correspond to pharmaceutically-manufactured medicines based on the pharmaceutically-manufactured medicine data stored in the third memory portion; and a fourth arithmetic operation portion for making the dispensation list which is determined to correspond to dispensation other than pharmaceutically-manufactured-medicines by the third arithmetic operation portion into a dispensation list of pharmaceutically-manufactured medicines similar to prescription of the dispensation list the contents of which do not correspond with the pharmaceutically-manufactured medicines based on the prescription aiding data stored in the first memory portion.

Therefore, when the third arithmetic operation portion determines that the generated dispensation list accords with drugs other than the pharmaceutically-manufacturedmedicines, the fourth arithmetic operation portion regenerates a dispensation list according with the pharmaceutically-manufactured medicines similar to that dispensation, thereby producing the dispensation list according with the pharmaceutically-manufactured medicines optimum for the patient's condition.

Moreover, a herb medicine prescription aiding system according to the present invention has the processing means provided with: a fourth memory portion storing a pharmaceutical avoidance list for detecting crude drugs and drugs which cause side effects; and a fifth arithmetic operation portion for collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects by a fifth arithmetic operation portion based on a pharmaceutical avoidance list stored in the fourth memory portion.

If the fifth arithmetic operation portion collates the drugs currently taken by the patient with crude drugs on the dispensation list and side effects are found, the crude drugs in question are warned, thereby preventing the crude drugs which may cause harmful side effects from being used beforehand.

Further, a storage medium according to the present invention comprises the steps of: selecting crude drugs effective for a patient' s condition based on the patient's chart data in accordance with a predetermined format; generating a dispensation list of the selected crude drugs; and outputting the generated dispensation list.

A dispensation list optimum for a patient' s condition can be therefore generated by only inputting the patient' s chart data in accordance with a predetermined format.

Furthermore, a storage medium according to the present invention further comprises the steps of: judging whether the contents of the generated dispensation list coincide with pharmaceutically-manufactured medicines; and generating a dispensation list of pharmaceutically-manufactured medicines similar to prescription of the dispensation list the contents of which do not correspond with the pharmaceutically-manufactured medicines when determined that prescription of the dispensation list coincides with the dispensation other than the pharmaceutically-manufactured medicines.

Even though the dispensation optimum for the patient is that other than pharmaceutically-manufactured medicines, regeneration of the dispensation list according with the pharmaceutically-manufactured medicines similar to that dispensation ensures generation of the dispensation list according with the pharmaceutically-manufactured medicines optimum for the patient's condition.

A storage medium according to the present invention further comprises the steps of: collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects; and warning of dispensation including the detected crude drugs.

It is therefore possible to prevent the drugs currently taken by the patient and the crude drugs which cause side effects from being used.

Since the dispensation list suitable for the patient' s condition can be generated by only installing data input/output means in a plurality of specific agencies, needs for crude drugs in stock or dispensing machines are eliminated and the burden of cost can be reduced, requiring no installation space of the dispensing machines.

Further, the processing means generates the dispensation list, and hence herb medicines having quality and stable effects can be prepared without expertise.

Other features and advantages of the present invention will become readily apparent from the following written description of the present specification and the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a view for explaining the structure of a herb medicine prescription aiding system according to a preferred embodiment of the present invention.

Fig. 2 is a block explanatory view of a computer in the herb medicine prescription aiding system according to the embodiment of the present invention.

Fig. 3 is a view showing the detailed questions about general symptoms of a chart data according to the embodiment of the present invention.

Fig. 4 is a view showing the detailed questions about principal symptoms of the chart data according to the embodiment of the present invention.

Fig. 5 is a view showing an example of an examination of tongue appearance of the chart data according to the embodiment of the present invention.

Fig. 6 is a view showing an output example of a direction output from the herb medicine prescription aiding system according to the embodiment of the present invention.

Fig. 7 is a flowchart of a computer program showing the operation of the herb medicine prescription aiding system according to the embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment according to the present invention will now be described in detail with reference to the drawings.

Fig. 1 is a view explaining the structure of a crude drug prescription aiding system according to one embodiment of the present invention; Fig. 2 is a block explanatory view of a computer in the crude drug prescription aiding system according to the embodiment of the present invention; Fig, 3 is a view showing an example of detailed questions about general symptoms of a chart data according to the embodiment of the present invention; Fig. 4 is a view showing an example of detailed questions about principal symptoms of a chart data according to the embodiment of the present invention; Fig. 5 is a view showing an example of an examination of tongue appearance of a chart data according to the embodiment of the present invention; Fig. 6 is a view showing an output example of a direction output from the crude drug prescription aiding system according to the embodiment of the present invention; and Fig. 7 is a flowchart of a computer program showing the operation of the crude drug prescription aiding system according to the embodiment of the present invention.

In this embodiment, a herb medicine prescription aiding system 1 for aiding prescription of herb medicines or storing various medical information is provided with a terminal device (data input/output means) 2 to which various chart data such as patients' conditions or medicinal records are input.

Further, the herb medicine prescription aiding system I includes a computer (processing means) 3 for aiding prescription of crude drugs based on a chart data input to the terminal device 2 and an input terminal device 4 such as a personal computer for inputting/outputting data from/to the computer 3.

The herb medicine prescription aiding system 1 is provided with a data output device 5 for outputting, e.g., printing out or faxing various data fed from the computer 3.

An output means is constituted by the input terminal device 4 and the data output device 5.

The above-described terminal device 2 is provided in a predetermined installation space in each of agencies T1 to Tn such as a specific pharmacy or drugstore under contract, and the computer 3 is installed in a compounding center CC such as a head office.

The terminal device 2 and the computer 3 are on-line-connected with each other over a communication line 6 such as a telephone line or a leased line.

As shown in Fig. 2, the computer 3 is provided with a dispensation data storing portion (first, third and fourth memory portions) 7 in which prescription aiding data such as dispensation data or crude drug efficacy data, medicine avoidance data, pharmaceutically-manufactured medicine data and others are stored.

The computer 3 also has a book data storing potion 8 in which Chinese medical data or herb medicine literature data are stored.

The book data storing portion 8 stores, for example, contents of books about herb medicine, and making an access to the computer 3 through the terminal device 2 and selecting information to be read ensures that information to be displayed on a display portion or the like of the terminal device, if necessary.

The computer 3 also includes a chart data storing portion (second memory portion) 9 for storing chart data that is necessary data about patients such as a medicinal record or prescription data output from the terminal device 2, e.g., patients' conditions, types of drug previously or currently taken by patients.

Moreover, the computer 3 is provided with a server 10 for performing network management on the communication line 6 and making an access to necessary lines.

The computer 3 has a host computer (first to fifth arithmetic operation portion) 11 for managing predetermined arithmetic operation processes for carrying out prescription aiding and all the controls over the computer 3, and is connected with the server 10. To the host computer 11 is connected with the above-mentioned input terminal device 4 that is connected with a data output device 5.

The operation of the present invention will now be described with reference to Figs. 1 to 6 and the flowchart of a computer program of Fig. 7.

For example, assuming that a patient has visited an agency T1, a pharmacist in the agency T1 makes an access to the computer 3 using an installed terminal device and inputs the above-described chart data such as medicinal record of that patient (step S101).

In the step S101, if the chart data has been already created for some reason, for example, the patient has come to the store, that chart data is fetched by operating the terminal device 2.

The pharmacist then asks the patient detailed questions about the general symptoms in accordance with a predetermined format as shown in Fig. 3, and selects and inputs results of the detailed questions using the terminal device 2 (step S102).

Thereafter, the pharmacist similarly asks detailed questions about the principal symptoms, and selects and inputs results of the detailed questions using the terminal device 2 (step S103)
Subsequently, the pharmacist then performs a so-called examination of tongue appearance by which the tongue appearance is observed and similarly inputs observations obtained by the examination of tongue appearance using the terminal device 2 as shown in Fig. 5 (step S104).

The data input to the terminal device 2 is output as the chart data to the computer 3 through the server 10 and stored in the chart data storing portion 9 (step S105).

The host computer 11 then performs a predetermined process based on the crude drugs efficacy data stored in the dispensation data storing portion 7 and the above-mentioned chart data (step S106) and stores the symptom result data that is a result of the process to the chart data storing portion 9 (step Sol07)

Here, the symptom result data consists of, for example, the explanation of the patient' s presumption, the presumed symptoms and others which are causes of the principal symptoms.

The symptom result data stored in the chart data storing portion 9 is also output to the terminal device 2 and the input terminal device 4, and display is carried out in a display portion of each device (step S108)
The symptom result data can be arbitrarily printed out by operating the terminal device 2 or the input terminal device 4.

Next, the pharmacist operates the terminal device 2 to select a dispensation process command.

When the dispensation process command is selected, the host computer 11 generates the dispensation list indicating a plurality of possible dispensations based on the dispensation data stored in the dispensation data storing portion 7, the chart data stored in the chart data storing portion 9 and input in the steps S101 to S104 and the symptom result data processed and output in the step S106, as shown in Fig. 7 (step S109)
At this time, the host computer also judges whether there is any dispensation other than pharmaceutically-manufactured medicines determined according to Drugs, Cosmetics and Medical Instruments Act on the generated dispensation list based on the pharmaceutically-manufactured medicine data stored in the dispensation data storing portion 7 and, if there is any dispensation other than the pharmaceutically-manufactured medicines, the host computer 11 again lists up and displays dispensations of the pharmaceutically-manufactured medicines similar to dispensation other than the pharmaceutically-manufactured medicines.

The host computer 11 thereafter collates the drugs which are currently taken by the patient and input in the step
S101 with crude drugs used on the dispensation list in the step
S109 based on the pharmaceutical avoidance data for detecting combinations of drugs which are stored in the dispensation data storing portion 7 and may cause harmful side effects (step
S110).

If there are crude drugs which may cause harmful side effect when used with the drugs currently taken by the patient on the dispensation list, those crude drugs are detected (step S111) .

The dispensation list generated by the host computer 11 is stored in the chart data storing portion 9 (step S112) and subsequently output to the terminal device 2 and the input terminal device 4 to be displayed on the respective display portions (step Ski 13).

At this time, if the crude drugs which may cause side effects are detected in the step Sill, the dispensations including the detected crude drugs are marked with a predetermined sign or the like and indicated on the dispensation list in order to prohibit their prescription.

After the pharmacist selects an optimum dispensation from the dispensation list by using the terminal device 2 or the input terminal device 4 installed in the compounding center CC, he or she confirms whether there is no error in the chart data (step S114), the chart data including the dispensation list is stored in the chart data storing portion 7 while the dispensation list is printed out from the data output device 5 if there is no error (step S115).

At the same time, the terminal device 2 and the input terminal device 4 display a table of selling prices of herb medicines per days for taking the prescribed medicines calculated based on the raw material unit cost data on their display portions, and that table is printed out from the data output device 5.

As shown in Fig. 6, on the display portions of the terminal device 2 and the input terminal device 4 are then displayed a direction indicating a prescribed dose of the dispensed crude drug, days for taking the medicine, caution, efficacy and others, and this direction is also printed out from the data output device 5.

Here, it is assumed that the dispensation list stored in the chart data storing portion 7 also includes various information concerning the dispensation such as a prescribed dose, days for taking medicines, caution, a record of manufacturing and others, as well as the dispensation of the crude drugs.

The dispensation list can be also printed out by operating the terminal device 2.

The pharmacist in the compounding center CC prescribes the crude drug based on the dispensation list printed out from the data output device 5, performs packing after putting the above-mentioned direction on a prescribed package or the like and sends it to the agency T1 or the patient' s address.

In this embodiment, since the crude drugs in stock in the respective agencies T1 to Tn can be eliminated, the cost required in each store can be greatly reduced.

Further, according to this embodiment, the dispensing machines also become unnecessary, and hence the cost required in each store can be largely deceased, thereby eliminating an installation space of the dispensing machines.

The invention achieved by the present inventors has been specifically described based on a preferred embodiment according to the invention. The present invention, however, should not necessarily be limited to the above-described embodiment, and, needless to say, can be modified variously within the scope not departing from the technical gist.

Advantages obtained by the typical characteristic of the invention disclosed in this application will be briefly described hereinbelow.

(1) According to the present invention, the dispensation list optimum'for the patient' s condition can be generated by only inputting the patient' s chart data in accordance with a predetermined format.

(2) In the present invention, even though the dispensation optimum for the patient is a dispensation other than the pharmaceutically-manufactured medicine, regeneration of the dispensation list according with the manufactured medicine similar to that dispensation can create the dispensation list according with the manufactured medicine that is optimum for the patient's condition.

(3) In the present invention, it is possible to prevent the crude drug which may cause side effects when used the drug that is currently taken by the patient from being used beforehand.

(4) According to the present invention, since the crude drugs in stock, the dispensing machines and the installation space for the dispensing machines become unnecessary in each agency due to the above

advantages (1) to (3), the burden of cost in the agency can be reduced, and herb medicines having quality and stable effects can be dispensed without expertise.

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Claims

CLAIMS

What is claimed is: 1. A herb medicine prescription-aiding method comprising the steps of:
inputting a patient' s chart data in accordance with a predetermined format by a data input/output means;
selecting crude drugs effective for the patient' s condition from a prescription aiding data stored in a first memory portion by a first arithmetic operation portion based on the input patient' s chart data;
generating a dispensation list of the selected crude drugs by the first arithmetic operation portion based on the prescription aiding data stored in the first memory portion; and
outputting the generated dispensation list by an output means.

2. A herb medicine prescription aiding method as set forth in claim 1 further comprising the steps of:
judging whether the contents of the generated dispensation list correspond to pharmaceutically-manufactured medicines by a third arithmetic operation portion based on a pharmaceutically-manufactured medicine data stored in a third memory portion; and
generating a dispensation list of pharmaceutically-manufactured medicines similar to prescriptions of the dispensation list the contents of which do not correspond to the pharmaceutically-manufactured medicines by a fourth arithmetic operation portion based on the prescription aiding data stored in the first memory portion when the third arithmetic operation portion determines that the contents of the dispensation list do not correspond to the pharmaceutically-manufactured medicines.

3. A herb medicine prescription aiding method as set forth in claim 1 further comprising the steps of:
collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects by a fifth arithmetic operation portion based on a pharmaceutical avoidance list stored in a fourth memory portion; and
warning of dispensations including the detected crude drugs by using the output means.

4. A herb medicine prescription aiding method as set forth in claim 2 further comprising the steps of:
collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects by a fifth arithmetic operation portion based on a pharmaceutical avoidance list stored in a fourth memory portion; and
warning of dispensations including the detected crude drugs by using the output means.

5. A herb medicine prescription aiding system comprising:
a plurality of data input/output means which are installed in a plurality of specific agencies and register, update or consult a chart of each patient;
a processing means which is constituted by a first memory portion storing a prescription aiding data for aiding prescription, a first arithmetic operation portion for generating a list of crude drugs effective for a patient' s condition based on a chart data input from the data input/output means and the prescription aiding data stored in the first memory portion, a second arithmetic operation portion for generating a dispensation list based on the crude drug list generated by the first arithmetic operation portion and the prescription aiding data stored in the first storing portion, and a second memory portion for storing the dispensation list generated by the second arithmetic operation portion and the chart data input from the data input/output means, the processing means on-line-connected with a plurality of the data input/output means; and
an output means for displaying or outputting the dispensation list generated by the processing means.

6. A herb medicine prescription aiding system as set forth in claim 5, wherein said processing means is provided with:
a third memory portion storing a pharmaceutically-manufactured medicine data;
a third arithmetic operation portion for judging whether the contents of the dispensation list generated by the second arithmetic operation portion correspond to pharmaceutically-manufactured medicines based on the pharmaceutically-manufactured medicine data stored in the third memory portion; and
a fourth arithmetic operation portion for making the dispensation list the contents of which are determined not to correspond to the pharmaceutically-manufactured medicines by the third arithmetic operation portion into a dispensation list of pharmaceutically-manufactured medicines similar to prescriptions of the dispensation list the contents of which do not correspond to the pharmaceutically-manufactured medicines

based on the prescription aiding data stored in the first memory portion.

7. A herb medicine prescription aiding system as set forth in claimS, wherein said processing means is provided with:
a fourth memory portion storing a pharmaceutical avoidance list for detecting crude drugs and drugs which cause side effects ~. i
a fifth arithmetic operation portion for collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects based on a pharmaceutical avoidance list stored in the fourth memory portion.

8. A herb medicine prescription aiding system as set forth in claim 6, wherein said processing means is provided with:
a fourth memory portion storing a pharmaceutical avoidance list for detecting crude drugs and drugs which cause side effects; and
a fifth arithmetic operation portion for collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects based on a pharmaceutical avoidance list stored in the fourth memory portion.

9. A storage medium for storing a computer program, said computer program comprising the steps of:
selecting crude drugs effective for a patient' s condition based on the patient' s chart data in accordance with a predetermined format;
generating a dispensation list of the selected crude drugs; and
outputting the generated dispensation list.

10. A storage medium as set forth in claim 9, wherein said computer program further comprising the steps of:
judging whether the contents of the generated dispensation list coincide with pharmaceutically-manufactured medicines; and
generating a dispensation list of pharmaceutically-manufactured medicines similar to prescription of the dispensation list the contents of which do not correspond to the pharmaceutically-manufactured medicines when determined that the contents of the dispensation list do not coincide with the pharmaceutically-manufactured medicines.

11. A storage medium as set forth in claim 9, wherein said computer program further comprising the steps of:
collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects; and
warning of dispensations including the detected crude drugs.

12. A storage medium as set forth in claim 10, wherein said computer program further comprising the steps of:
collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects; and
warning of dispensations including the detected crude drugs.

13. A herb medicine prescription aiding system substantially as hereinbefore described with reference to the accompanying drawings.

Amendments to the claims have been filed as follows 1. An apparatus adapted and arranged for automated prescribing of herb medicine, said apparatus comprising:
a processing means;
at least one data input/output means which are installed in at least one specific agency said means being adapted to register, update or consult a chart of each patient;
a communication line between the processing means and the or each data input/output means;
said processing means comprising a first memory portion storing a prescription aiding data for aiding prescription, a first arithmetic operation portion for generating a list of crude drugs effective for a patient's condition based on a chart data input from the data input/output means and the prescription aiding data stored in the first memory portion, a second arithmetic operation portion for generating a dispensation list based on the crude drug list generated by the first arithmetic operation portion and the prescription aiding data stored in the first storing portion, and a second memory portion for storing the dispensation list

generated by the second arithmetic operation portion and the chart data input from the data input/output means; and
an output means for displaying or outputting the dispensation list generated by the processing means.

2. An apparatus as claimed in claim 1, wherein said processing means comprises:
a third memory portion storing a pharmaceutically-manufactured medicine data;
a third arithmetic operation portion for judging whether the contents of the dispensation list generated by the second arithmetic operation portion correspond to pharmaceutically-manufactured medicines based on the pharmaceutically-manufactured medicine data stored in the third memory portion; and
a fourth arithmetic operation portion for making the dispensation list the contents of which are determined not to correspond to the pharmaceutically-manufactured medicines by the third arithmetic operation portion into a dispensation list of pharmaceutically-manufactured medicines similar to prescriptions of the dispensation list the contents of which do not correspond to the pharmaceutically-manufactured medicines based on the prescription aiding data stored in the first memory portion.

3. An apparatus as claimed in claim 1, wherein said processing means comprises:
a fourth memory portion storing a pharmaceutical avoidance list for detecting crude drugs and drugs which cause side effects; and
a fifth arithmetic operation portion for collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects based on a pharmaceutical avoidance list stored in the fourth memory portion.

4. An apparatus as claimed in claim 2, wherein said processing means comprises:
a fourth memory portion storing a pharmaceutical avoidance list for detecting crude drugs and drugs which cause side effects; and
a fifth arithmetic operation portion for collating crude drugs on the generated dispensation list with drugs currently taken by the patient to detect crude drugs which may cause harmful side effects based on a pharmaceutical avoidance list stored in the fourth memory portion.

5. An apparatus for automated prescribing of herb medicines substantially as hereinbefore described with reference to the accompanying drawings.

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Fig.1

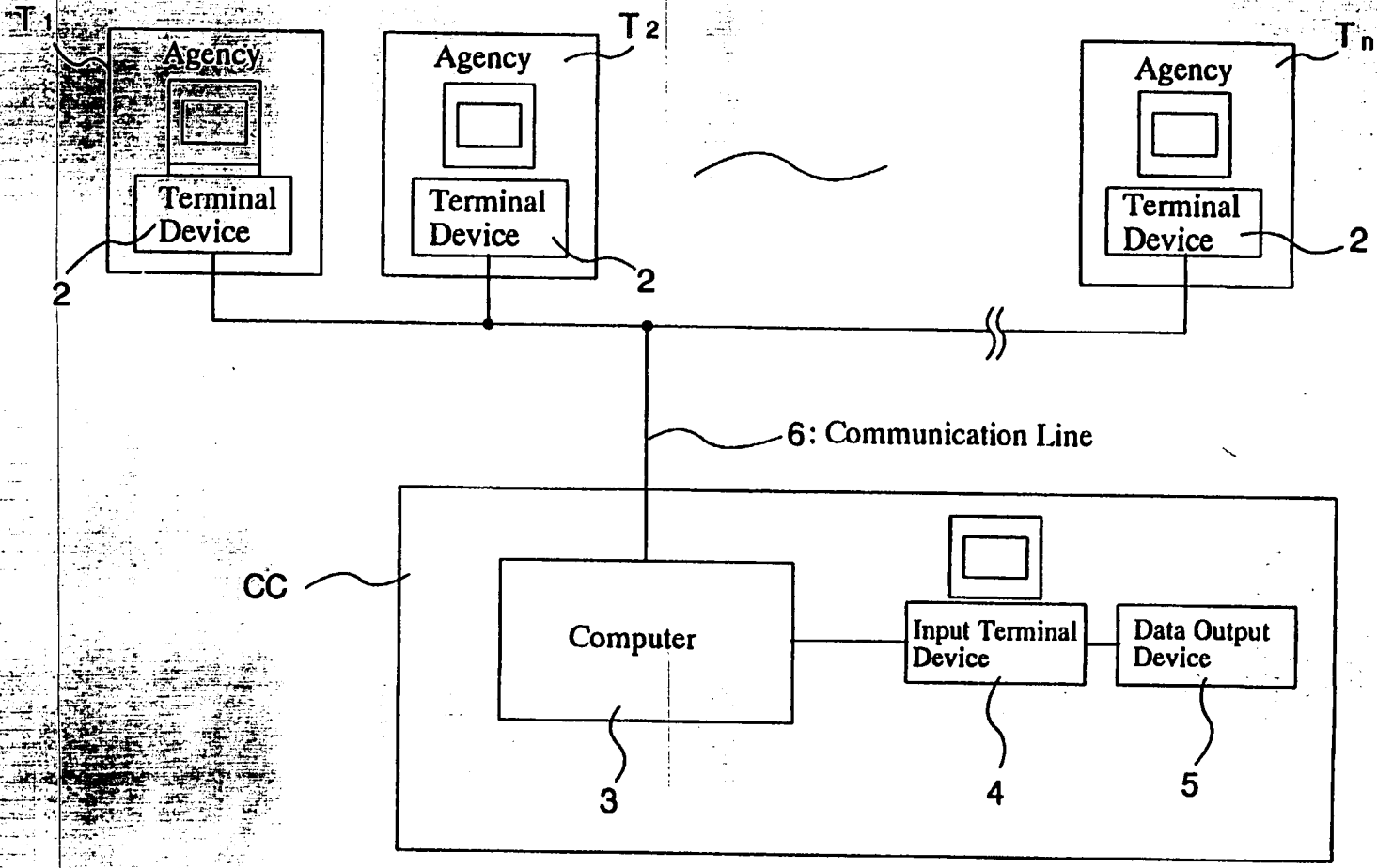

T1
Agency
Terminal Device
2
T2
Agency
Terminal Device
2
Tn
Agency
Terminal Device
2
6: Communication Line
CC
Computer
3
Input Terminal Device
4
Data Output Device
5

Fig.2

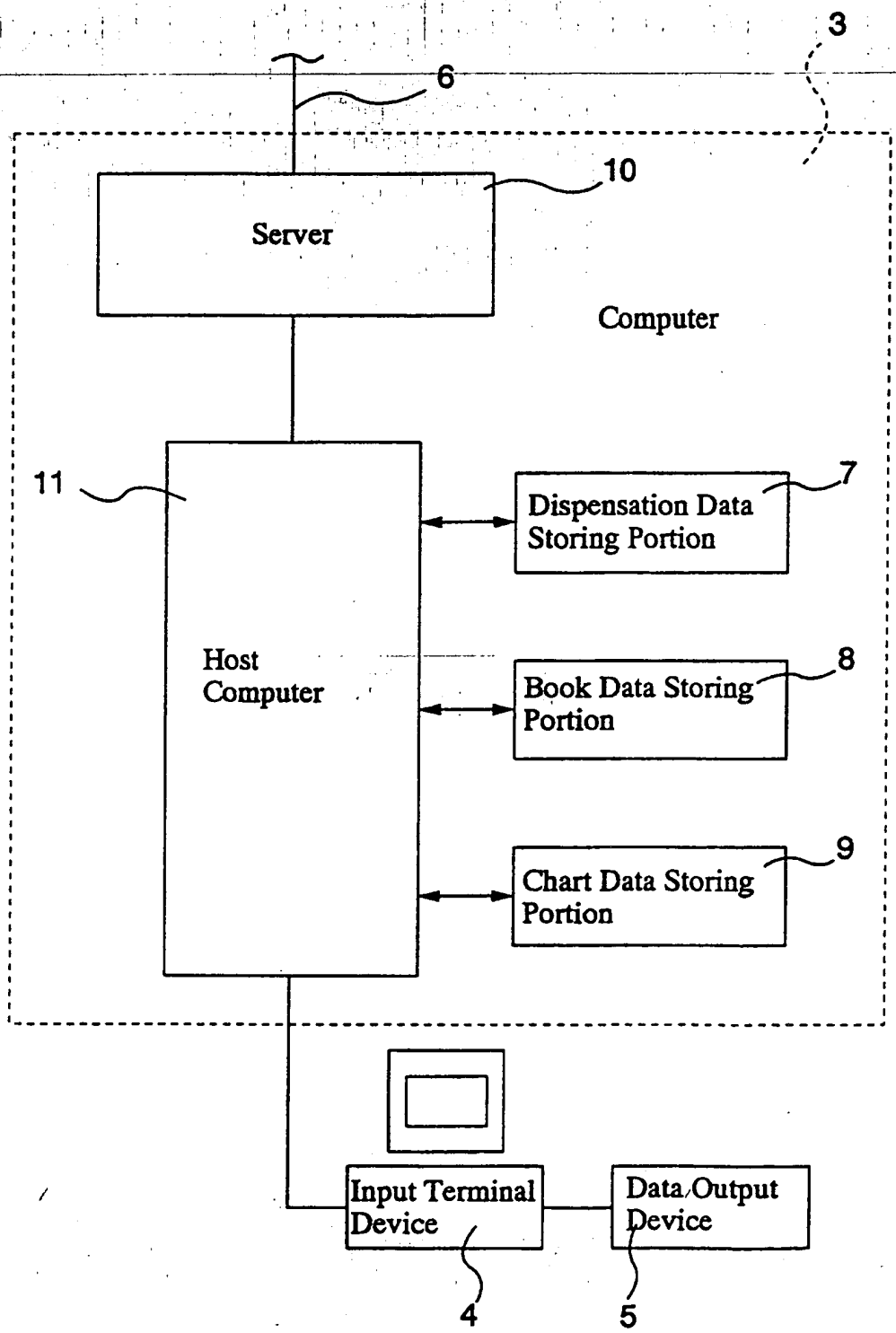

3
6
10
Server
Computer
11
Host Computer
Dispensation Data Storing Portion
7
Book Data Storing Portion
8
Chart Data Storing Portion
9
Input Terminal Device
Data Output Device
4
5

Fig. 3

Patient No. 1 | Patient Name | Sex | Age

GENERAL SYMPTOMS

1. The symptom worsens when the day is humid.
2. Often feel feverish.
3. Often feel dullness in limbs and body.
4. Readily feel exhausted and am tired of doing things.
5. Readily feel chillness.
6. Do not like to be exposed to the air from a cooler.
7. Superficial vessels protrude from the skin surface.
8. Have had a severe wound(s) or surgical operation(s).
9. Do not fall into sleep easily and often have dreams.
10. Often get awake at dawn.
11. Feel reluctant to get up from the bed, and often become late for work or school.
12. Give a foul odor from the mouth.
13. Feel a bitterness in the mouth, and a heartburn.
14. Often discharge serous secrets from nose and throat.
15. Nasal discharge and sputum are sticky and have often color.
16. The tongue often develops an eruption(s).
17. Lips look pale.
18. Have irregular menstruations.
19. Feel something clogging the throat or stomach.
20. The throat often swells and develops a pain.
21. Often have a blurred eye-sight, and feel a fatigue in association.
22. Have a poor sense of smell.
23. The face, and hands and feet often develop an edema(s).
24. Have a dull sensation in the head, and sometimes feel dizzy.
25. The scalp hair often grow coarse and brittle.
26. People often say that your voice is too low to be audible.
27. Have a disease in the heart or in the vascular system.
28. Often develop a hypertension.
29. Easily develop a postural hypotension when rising up.
30. Readily feel a palpitation during movement.
31. Sometimes feel a discomfort in the chest.
32. Am mildly obese.

Return to foregoing (entry of patient data).

Progress to next (entry of principal symptoms).

Select an appropriate numeral(s) in General Symptoms which gives the symptoms agreeing with yours.

Fig. 4

Patient No. 1 Patient Name Sex Age

GENERAL SYMPTOMS

[Systemic]
1. Fever
2. Chillness
3. Fatigue/dullness
4. Extreme thinness
5. Obesity
6. Coldness in parts of the body
7. Perspiration with facial flashing

[Neuromuscular]
8. Irritation
9. Insomnia
10. Anxiety
11. Depression
12. Headache
13. Facial pain (ocular pain)
14. Low back pain
15. Upper limb pain
16. Lower limb pain
17. Polyarthlitic pain (upper body)
18. Polyarthlitic pain (lower body)
19. Polyarthlitic pain (entire body)
20. Back pain
21. Numbness (upper body)
22. Numbness (lower body)
23. Numbness (entire body)
24. Shoulder tenderness
25. Convulsions
26. paralysis of peripheral origin (upper body)
27. paralysis of peripheral origin (lower body)
28. paralysis of peripheral origin (entire body)
29. Hemiplegia

[Cardiovascular]
30. Hypertension
31. Hypotension
32. Congestion
33. Anemia
34. Congenital blood coagulation defect
35. Lymphedema
36. Palpitation
37. Chest pain
38. Hemorrhoids/rectal prolapse

[Upper digestive tract]
39. Anorexia
40. Jaundice
41. Tooth ache
42. Stomatitis
43. Dry mouth/thirsty
44. Disturbed swallowing
45. Hiccup
46. Nausea/vomiting
47. Gastric bleeding
48. Discomfort in the stomach
49. Swelling/pain at the lowest thorax
50. Swelling/pain at the upper abdomen
51. Liver disorder
52. Gallstone/cholestitis

[Lower digestive tract]
53. Swelling at the lower abdomen
54. Swelling at the lower abdomen
55. Distention feeling of the abdomen
56. Ascites

Return to foregoing (entry of patient data).

Progress to next (entry of principal symptoms).

Select an appropriate numeral(s) in General Symptoms which gives the symptoms agreeing with yours.

Fig. 5

EXAMINATION OF TONGUE APPEARANCE

1. Color of tongue: light red
2. Color of the thickened epithelium of the tongue: whitish
3. Thickness of the thickened epithelium: thin

   (wetness/dryness): normal
4. Shape of the tongue: normal

   (Serrate/fissural): tooth impressions
5. Scab formation: absent

Fig. 6(c)

1 day dose
wraps
Product No.

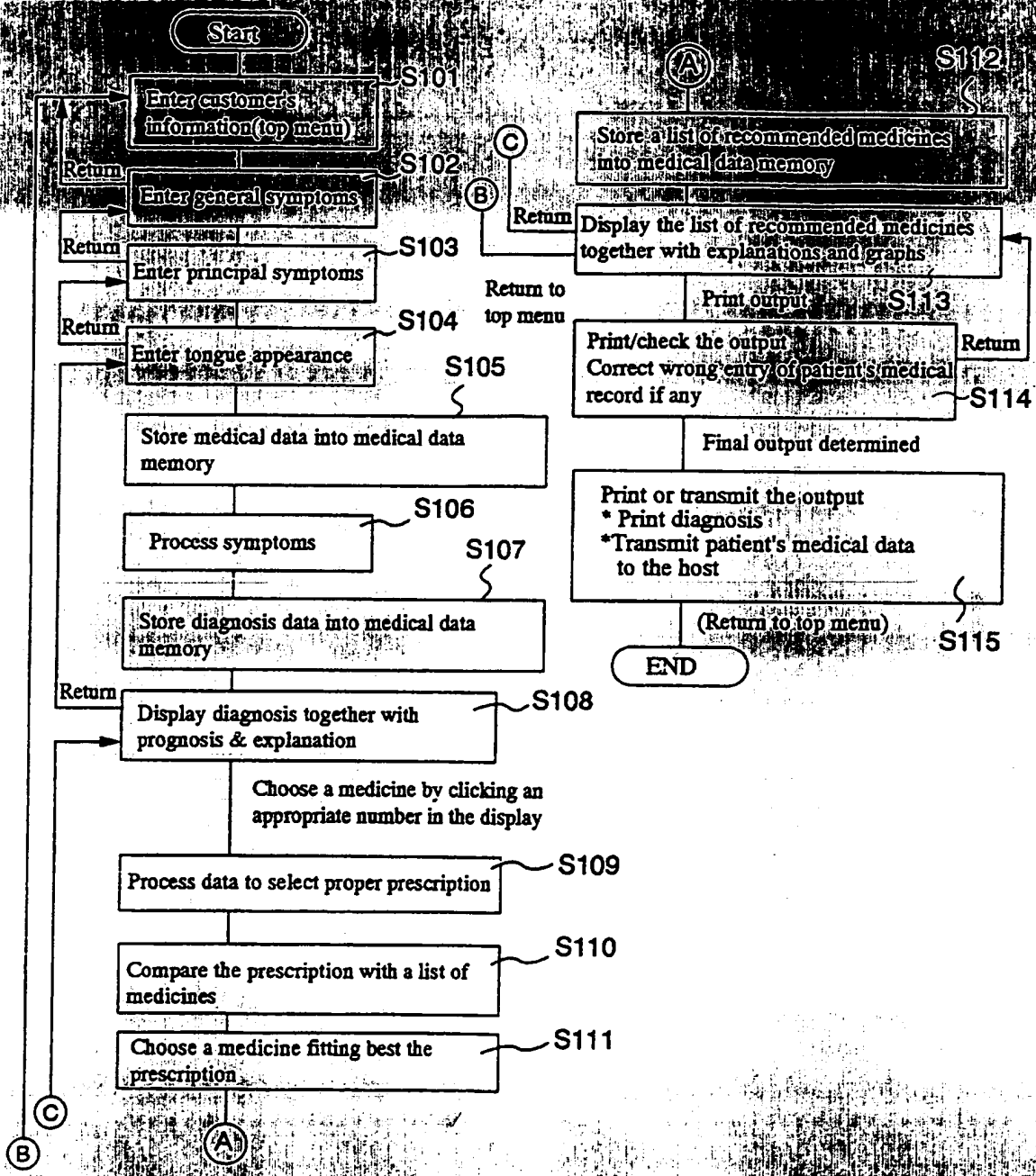
Puerariae radix
(the root of a perennial vine)

COMPOSITION, AMOUNTS OR ACTIVE INGR-EDIENTS	Puerariae radix prepared according to Japanese Official Prescription 8.0g Ephedraceae prepared according to Japanese Official Prescription 4.0g Zingiberis rhizoma prepared according to Japanese Official Prescription 1.0g Zizyphi fructus prepared according to Japanese Official Prescription 4.0g Cinnamonomi cortex prepared according to Japanese Official Prescription 3.0g Paeoniae radix prepared according to Japanese Official Prescription 3.0g Glycyrhizae radix prepared according to Japanese Official Prescription 2.0g Total 25.0g
ADMINISTRA-TION AND DOSE	Place the product contained in a wrap made of a sheet of processed plant fibers (Japanese traditional paper) into a vessel, add about 500ml of water for extraction of its content, and boil the water until the water is reduced to half its original volume. Remove the residue with the wrap, divide the remaining extract solution into three equal portions, and take each one between meals. One wrap of product contains one-day dose for an adult. The child younger than 15 years and not younger than 7 years should take a dose two thirds that of adult. The child younger than 7 years and not younger than 4 years should take a dose half that of adult. The infant younger than 2 years should take a dose one fourth that of adult.
INDICATIONS AND EFFICACY	Influenza, light cold with nasal discharge, headache, shoulder tenderness, muscle pains, pains in hands and shoulders.

CAUTION

1. Don't take this medicine, when you have any one of following symptoms.
   1) Have an anorexia, nausea, or vomiting.
   2) Readily develop a vigorous perspiration.
2. Consult a physician or pharmacist before you take this medicine, when you have any one of following symptoms.
   1) Have a weak constitution.
   2) Have a weak stomach.
   3) Have a hypertension, or are very old.
   4) Have a disorder(s) in the heart or kidneys.
   5) Are edematous.
   6) Have developed eruption, erythema, itching etc. after taking this medicine.
   7) Are pregnant, or suspected of being pregnant.
   8) Are under treatment by a physician.

Fig.7


Start
S101
Enter customer's information (top menu)
Return
S102
Enter general symptoms
Return
S103
Enter principal symptoms
Return
S104
Enter tongue appearance
S105
Store medical data into medical data memory
S106
Process symptoms
S107
Store diagnosis data into medical data memory
Return
S108
Display diagnosis together with prognosis & explanation
Choose a medicine by clicking an appropriate number in the display
S109
Process data to select proper prescription
S110
Compare the prescription with a list of medicines
S111
Choose a medicine fitting best the prescription
A
B
C
S112
Store a list of recommended medicines into medical data memory
Return
Display the list of recommended medicines together with explanations and graphs
Return to top menu
Print output
S113
Print/check the output
Correct wrong entry of patient's medical record if any
Return
S114
Final output determined
Print or transmit the output
* Print diagnosis
*Transmit patient's medical data to the host
(Return to top menu)
S115
END

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